

TDB-ACC-NO: NN7707736

DISCLOSURE TITLE: Remote Display for Point Of Sale Terminal. July 1977.

PUBLICATION-DATA: IBM Technical Disclosure Bulletin, July 1977, US

VOLUME NUMBER: 20

ISSUE NUMBER: 2

PAGE NUMBER: 736 - 739

PUBLICATION-DATE: July 1, 1977 (19770701)

CROSS REFERENCE: 0018-8689-20-2-736

DISCLOSURE TEXT:

4p. The display 10 (Fig. 1) is mounted on a point of sale

terminal (commonly called a cash register) 12 by tubular shaft 14.

Display 10 may be raised or lowered with respect to terminal 12, and

clamp ring 16 extends around shaft 14 and anchors display 10 in a

selected elevation with respect to terminal 12.

Display 10

incorporates a rotatable friction connection 18 with respect to shaft

1C so that display 10 can be rotated 180 degrees either right or

left, and remains in an adjusted rotative position until a definite

force is applied to rotate the display to a new position.

- Display 10 comprises casing 20 (Fig. 3) having display windows

22 and 24 in opposite sides thereof. Double sided display card 26 is

fixed within casing 20 and exhibits different numerals on both sides

of card 26 and visible through the opposite windows 22 and 24

depending on the manner of energization of various lighting segments of card 26. A column of electric indicator lamps 28 protrudes from one side of casing 20, and a similar column of lamps 29 protrudes from the other side of casing 20. It is intended that preferably the same numerals shall be exhibited by card 26 through opposite windows 22 and 24 and that corresponding ones of lamps 28 and 29 will be lighted at the same time, so that the indications from the two opposite sides of the display 10 are the same.

- The rotatable friction connection 18 is between male plug 30, which is disposed in the lower end of casing 20 and which has a groove 18a, and an annular rim portion 20a of casing 20 extending into groove 18a. Rim portion 20a bears on the bottom and sides of groove 18a to provide a frictional engagement of the rim portion 20a with plug 30. Plug 30 includes a plurality of pins 32, and electric leads 34 connect card 26 and lamps 28 and 29 with plug 30 and particularly with pins 32. Shaft 14 has a female socket 36 in its upper end for receiving pins 32, and electric leads 38 extend through shaft 14 from the internal circuitry of terminal 12 and are connected to socket 36.

- Clamping ring 16 (Fig. 2) has a threaded connection with threaded collet 40 having a lower flange 40a fitting against the lower internal surface 12a of the top panel of terminal 12 and an upper portion with an external thread 40b and longitudinal slots 40c. Clamp ring 16 has internal tapered threads to contract the upper portion of collet 40 to tighten shaft 14 with respect to collet 40.

and ring 16.

- Point of sale terminal 12 includes a keyboard 42, and it is

intended that lamps 28 and 29 shall be lighted and that display card

26 shall indicate numerically which of the keys of the keyboard 42

have been depressed and other information, such as the totals or

subtotals of particular sales, the terminal 12 incorporating summing

circuitry for this purpose. The terminal 12 may be used in a number

of dispositions, such as at a grocery checkout counter, with the

items sold being checked out from either side of the terminal 12 or

from its rear. In this connection the display 10 can be adjustably

rotated so that the two sides of the display face the opposite two

sides of the terminal 12 or face to the front and rear of terminal

12, this rotation being against the friction fit of rim portion 20a

of housing 20 and male plug 30.

- Shaft 14 does not rotate under these circumstances; however,

shaft 14 is vertically adjustable with respect to the point of sale

terminal 12 by loosening clamp ring 16 so that display 10 is either

higher or lower and then retightening clamp ring 16.

It may be

desirable to increase the length of shaft 14 that protrudes above the

upper panel of terminal 10 so that display 10 may be visible over an

adjacent stack of merchandise, for example, although it is

contemplated that display 10 shall, for most uses, be approximately 8

inches above the upper panel of terminal 12.

- Display 10 may be easily unplugged with respect to shaft 14 and

female socket 36 so that it may be serviced and then replaced simply

by withdrawing pins 32 from socket 36. It will be

observed that pins

32 are enclosed within the housing 20 and do not protrude therefrom;

pins 32 are thus protected from being damaged in the handling of

display 10. Shaft 14 encloses leads 38 and thus provides a housing

and protection for these leads and eliminates safety hazards which

might be due to exposure of leads 38.

SECURITY: Use, copying and distribution of this data is subject to the restrictions in the Agreement For IBM TDB Database and Related Computer Databases. Unpublished - all rights reserved under the Copyright Laws of the United States. Contains confidential commercial information of IBM exempt from FOIA disclosure per 5 U.S.C. 552(b) (4) and protected under the Trade Secrets Act, 18 U.S.C. 1905.

COPYRIGHT STATEMENT: The text of this article is Copyrighted (c) IBM Corporation 1977. All rights reserved.

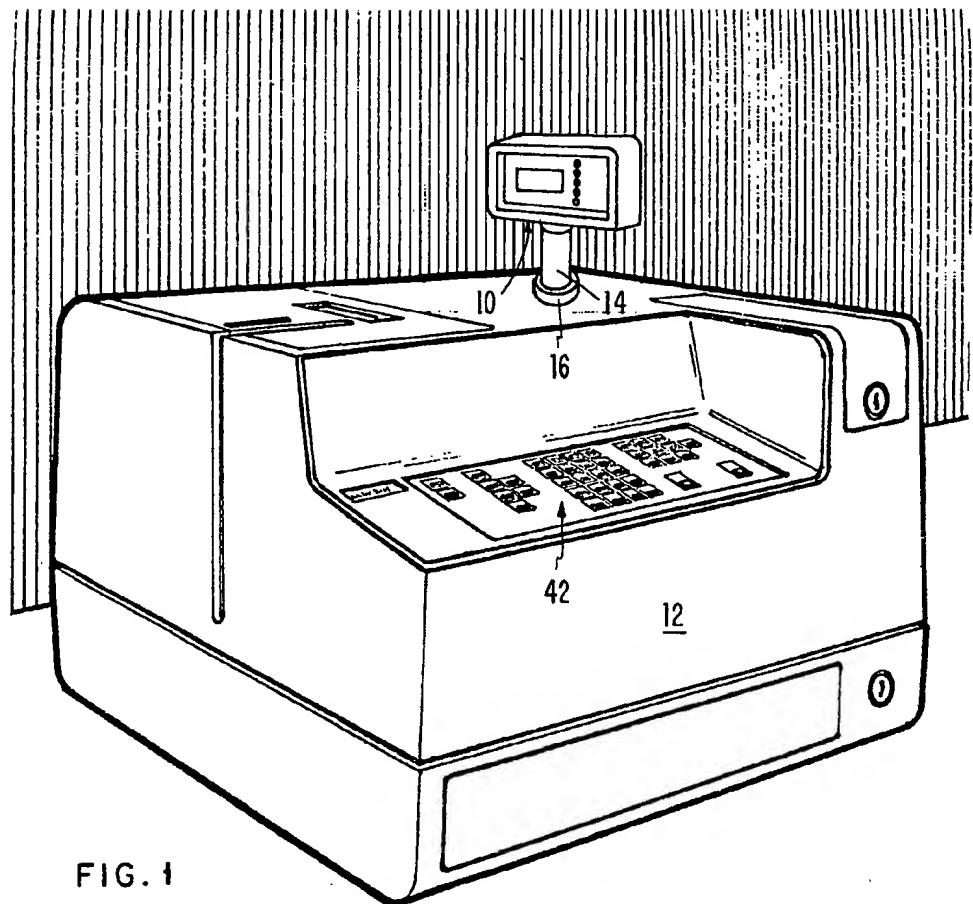


FIG. 1

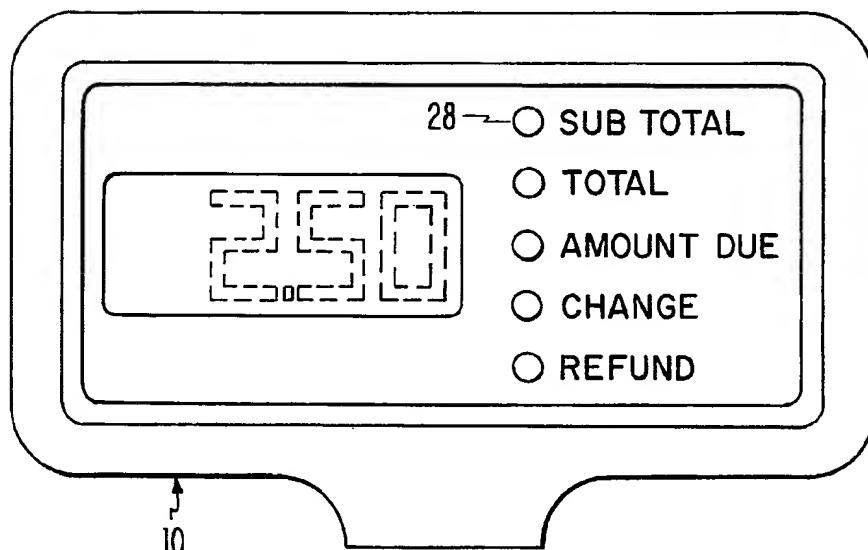


FIG. 2

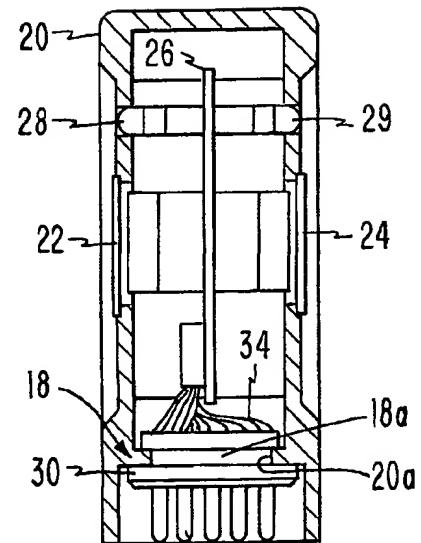
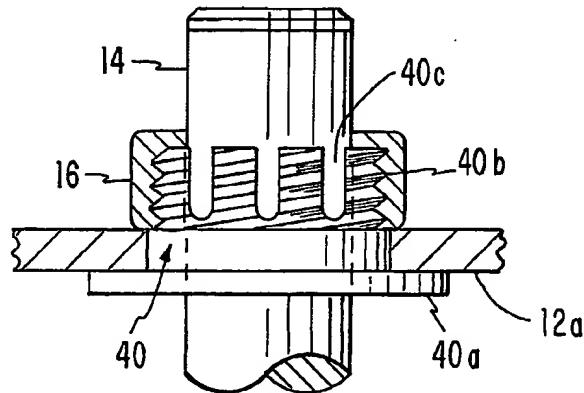


FIG. 3